#### BHARTIYA INSTIYUTE OF ENGINEERING & TECHNOLOGY-SIKAR

Department of Computer Science & Engineering

#### VI Semester

### SUB: ARTIFICIAL INTELLIGENCE (6CS4-05)

### QUESTION BANK

#### UNIT-1

### **Short type**

- Q1. Describe the artificial intelligence?
- Q2. What do mean by problem solving?
- Q3. Define the heuristic search?
- Q4. How many approaches are there to be executing AI?

### Long type

- Q1. Explain breadth first search for uninformed searching?
- Q2. Explain depth first search for uninformed searching?
- Q3. What do you mean by hill climbing search? Explain?
- Q4. Explain greedy search with an example?
- Q5. Explain A\* search with an example?
- Q6. Explain AO\* search with an example?

#### UNIT-2

# **Short type**

- Q1. What do you mean by game playing concepts in AI?
- Q2. Define jug problem statement?
- Q3. What do you mean by chess problem?

# Long type

Q1. Explain minimax searching problem of artificial intelligence?

- Q2. Explain alpha-beta pruning with an example in artificial intelligence?
- Q3. . Explain water jug problem with an example of artificial intelligence?
- Q4. Explain tiles problem with an example of artificial intelligence?

#### UNIT-3

### **Short type**

- Q.1 Define the knowledge?
- Q2. How we can build knowledge?
- Q3. Define first order logic?
- Q4. Define propositional logic

### Long type

- Q1. Explain the knowledge base building criteria in brief?
- Q2. Write the propositional logic for given sentences:

The laptop cost is high.

Ram loves to seta

Q3. Write the first order predicate logic for given sentences:

All persons have not equal salary in sales department

Some of balls are black except one is white.

- Q4. Explain the role of situation calculus in AI with an example?
- Q5. How partial order planning works? Explain in detail?
- Q6. How you can define uncertain knowledge with reasoning?
- Q7. Write down short notes on Bayesian networks?

#### UNIT-4

# **Short type**

- Q1. Define the learning in AI?
- Q2. What do you mean by term SVM?
- Q3. What is a neural network?
- Q4. What are the different forms of learning?

### Long type

- Q1. Define the learning? Explain supervised base learning?
- Q2. What do you mean by learning decision tree?
- Q3. Explain market basket analysis in detail?
- Q4. How neural networks work in artificial intelligence?
- Q5. Differentiate supervised learning and unsupervised based learning?

#### UNIT-5

# **Short type**

- Q1. Define NLP?
- Q2. What is expert system?
- Q3. What you mean by robotics?

# Long type

- Q1. Define NLP? What are the different issues in NLP?
- Q2. How do expert system helps in artificial intelligence?
- Q3. How we can work on robotics by using NLP?